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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,953	01/09/2006	David N. Cooper	348-079	8859
1009 KING & SCH	7590 04/16/200 ICKLI PLLC	EXAMINER		
247 NORTH E	BROADWAY	ZHOU, SHUBO		
LEXINGTON, KY 40507			ART UNIT	PAPER NUMBER
	1631			
			MAIL DATE	DELIVERY MODE
			04/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/539,953 COOPER ET AL.

Office Action Summary		Examiner	Art Unit					
		SHUBO (Joe) ZHOU	1631	I				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address								
Period fo	or Reply							
WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLA Chelver Is Longer, From THE MAILING DA masons of time may be available under the provisions of 37 CFR 1.13 SIX (6) MCNTHS from the making date of this communication. The provision of the provision of the communication of t	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tin till apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this of D (35 U.S.C. § 133).					
Status								
1)	1) Responsive to communication(s) filed on							
	2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.							
	Since this application is in condition for allowar	secution as to the	e merits is					
-,_	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
	4) Claim(s) 9-15 is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.								
6) Claim(s) is/are rejected.								
	7)							
0/23	Open Chaim(s) 3-10 are subject to restriction and/or election requirement.							
Applicati	ion Papers							
9)	The specification is objected to by the Examine	r.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) All b) Some * c) None of:								
1. Certified copies of the priority documents have been received.								
Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen	t(s)							
	ce of References Cited (PTO-892)	4) Interview Summary						
	te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/S5(08)	Paper No(s)/Mail Da 5) Notice of Informal P						

8) LI Other.	
(E) 5) Notice	of Informal Patent Application
	No(s)/Mail Date
4) ☐ Intervi	ew Summary (PTO-413)
	(PTO-948) Paper

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DETAILED ACTION

Restriction/Election Requirement

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

- Claim 13, drawn to a method for predicting a super-maximal and/or a subminimal haplotype that are major determinants of a corresponding super-maximal.
- II. Claim 14, drawn to a method for identifying at least one single nucleotide polymorphism that is of phenotypic significance.
- III. Claim 15, drawn to a method for detecting a haplotype effective to act as an indicator of at least one phenotype in an individual.

The methods of groups I-III are distinct, each from each other. The only technical feature shared by the three groups is the invention of claims 9-12, which is anticipated by Chasman et al, Payseur et al., and Reich et al. as indicated in the 409 during the international stage of this 371 application (applicant should already have received these references during the international stage, but will be provided with the references by the Office upon request). Thus, the technical feature of the methods is not special and the groups are not so linked under PCT Rule 13.1.

Claims 9-12 link inventions I-III. The restriction requirement between the linked inventions is **subject to** the nonallowance of the linking claim(s), claims 9-12. Upon the

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indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104. Claims that require all the limitations of an allowable linking claim will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

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application. Any amendment of inventorship must be accompanied by a request under 37 CFR

1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shubo (Joe) Zhou, whose telephone number is 571-272-0724. The examiner can normally be reached Monday-Friday from 8 A.M. to 4 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjorie Moran, can be reached on 571-272-0720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

/ Shubo (Joe) Zhou/ Shubo (Joe) Zhou, Ph.D. Primary Examiner